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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/024,647	12/14/2001	Alper Ilkbahar	10519/60	2628
7590	12/01/2004		EXAMINER	
Joseph F. Hetz BRINKS HOFER GILSON & LIONE P.O. BOX 10395 CHICAGO, IL 60610			BONZO, BRYCE P	
			ART UNIT	PAPER NUMBER
			2114	

DATE MAILED: 12/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/024,647

Applicant(s)

ILKBAHAR ET AL.

Examiner

Bryce P Bonzo

Art Unit

2114

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-7 and 17-29 is/are allowed.
- 6) ☒ Claim(s) 8, 11 and 30 is/are rejected.
- 7) ☒ Claim(s) 9, 10, 12-16 and 31-34 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

NON-FINAL OFFICIAL ACTION

Status of the Claims

Claims 8,11 and 30 are rejected under 35 USC §102.

Claims 1-7 and 17-29 are allowed.

Claims 9,10, 12-16 and 31-34 are objected to while containing allowable subject matter.

Rejections under 35 USC §102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 8, 11 and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Matsumoto (United States Patent No. 5,878,203).

As per claim 8, Matsumoto discloses:

A method for storing bits in non-adjacent storage locations in a memory array of a memory device, the method comprising:

(a) providing a memory device comprising a register and a memory array coupled with the register (column 7, lines 34-35, the buffer to the host and the disk array);

(b) providing a plurality of bits to the memory device (column 7, lines 34-36: the plurality of bits provided to the memory device are received at the host buffer);

(c) storing the plurality of bits in the register in a first direction (column 7, lines 34-36: the direction is from the host to the buffer);

(d) reading the plurality of bits from the register in a second direction (column 7, lines 34-36: the direction is from the buffer to the disk array); and

(e) storing the plurality of bits in the memory array, wherein bits that are adjacent to one another when provided to the memory device are stored in non-adjacent storage locations in the memory array (column 7, lines 43-46: under a RAID 3/5 the bits are scattered across the disk drives, and as the bits are different drives, they can not be adjacent).

As per claim 11, Matsumoto discloses:

(f) reading the plurality of bits stored in (e) from the memory array (this is disclosed as the reverse process of limitation e)

(g) storing the plurality of bits read in (f) in the register in the second direction (this is disclosed as the reverse process as limitation b/c); and

(h) reading the plurality of bits stored in (g) from the register in the first direction (this is disclosed as the reverse process of limitation a).

As per claim 30, Matsumoto discloses:

A method for storing bits in non-adjacent storage locations in a memory array of a memory device, the method comprising:

(a) providing a host device coupled with a memory device comprising a memory array (column 7, lines 34-36: the host buffer and the disk array);

(b) providing a plurality of bits arranged adjacent to one another (column 7, lines 43-46: under a RAID 3/5 the bits are scattered across the disk drives, and as the bits are different drives, they can not be adjacent); and

(c) with the host device providing the plurality of bits to the memory device such that the memory device will store adjacent bits of the plurality of bits in nonadjacent storage locations in the memory array (column 7, lines 43-46: under a RAID 3/5 the bits are scattered across the disk drives, and as the bits are different drives, they can not be adjacent).

Allowable Matter

Claims 1-7 and 17-29 are allowed.

Claims 9,10, 12-16 and 31-34 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bryce P Bonzo whose telephone number is (571)272-3655. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on (571)272-3645. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Bryce P. Bonzo

Bryce P Bonzo
Examiner
Art Unit 2114